## PRObE: Parallel Reconfigurable Observational Environment

An NSF-sponsored computer systems research center



## PRObl

- The **PRObE** NSF center will provide two classes of computing resources: large research clusters and unique and advanced hardware.
- The large clusters will be repurposed machines from DOE facilities. The machines will be older generation technology researchers can use to do large-scale research.
- Researchers will have dedicated use of a complete cluster to execute research.





















- Highly reconfigurable, remotely accessible and controllable environment dedicated to systems research, including Operating Systems, Storage, and High End Computing
- Researchers will have complete control of cluster resource while running experiments
- Researchers can inject both hardware and software failures while monitoring the system to see how it reacts to such failures
- PRObE, at full production scale, will provide at least two 1024 node clusters, one of 200 nodes, and some smaller machines with extreme core count and bleeding edge technology
- The PRObE research environment will be based on Emulab testbed-management software

